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10/566,885	02/01/2006	Ulrich Stauss	06-112	9863
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EXAMINER				
GARCIA, ERNESTO				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,885

Applicant(s)

STAUSS, ULRICH

Examiner

ERNESTO GARCIA

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-45 is/are pending in the application.
4a) Of the above claim(s) 28, 29 and 31-37 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 23-27, 30, 38-42 and 45 is/are rejected.
7) ☒ Claim(s) 43 and 44 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☒ Other: Translation of DE-20,106,561

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election of Species

This application contains claims 28, 29, and 31-37 are drawn to an invention nonelected with traverse in the reply filed on September 11, 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

The drawings were received on April 10, 2008. These drawings are acceptable. However, the applicant's remarks about "the planes extending from the longitudinal axis of the shaft 30" on page 14 raises a new drawing objection as the planes are not shown; yet critical as argued.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the planes and the planes extending from the shaft longitudinal axis (M) (claim 23, line 10) must be shown

or the feature(s) canceled from the claim(s). No new matter should be entered. Note that no such planes are shown.

The drawings are objected to because it is unclear where the axis M and the axis A terminate in Figure 2. Note that both axes are in the vertical direction and should be distinguished from each other using different patterns.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 23-27, 30, and 38-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 23, the recitation “a profile longitudinal axis (A)” in line 3 makes unclear whether the axis is that of the profile being described or that of the other profile. Note that the axis could be of that of either profile. The recitation “and, in at least one profile side surface” in lines 4-5 makes unclear whether the profile channel is also in the side surface.

Regarding claim 45, the recitation “an angle (y)” in line 1 and “an axis (Q)” in lines 1-2 makes unclear whether the angle is another angle and whether the axis is another axis than that recited in claim 41, lines 1-2, or the same one.

Regarding claims 24-27, 30, and 38-44, the claims depend from claim 23 and therefore are indefinite.

Claim Rejections - 35 USC § 102

Claims 23 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller, DE-20,106,561.

Regarding claim 23, Muller discloses, in Figures 1, 5, and 8, a device comprising a first hollow profile **1**, a second hollow profile **2**, and a connecting screw **3**. The profiles **1,2** are arranged approximately at right angles to one another. Each of the profiles **1,2** has a profile channel **21** parallel to a longitudinal axis **L2** of the respective profile channel **21**, and at least one profile side surface having an undercut longitudinal groove **10** parallel to the longitudinal axis **L2**. The connecting screw **3** holds the profiles **1,2** together. A shaft **30** of the screw **3** engages in the profile channel **21** of one of first profiles **1** and a screw head **32** of the screw **3** is mounted in the undercut longitudinal groove **10** of the second profile **2**. The screw head **32** is provided on a periphery with grooves or notches **A1** (see marked-up attachment) running in planes **A2** extending from a longitudinal axis **S** of the shaft **30** and forming ribs **310** between the grooves or notches **A1**.

Regarding claim 30, the shaft **30** of the connecting screw **3** is provided with a cutting thread (see translation; page 12, third paragraph).

Regarding claim 38, the screw head **32** is arranged in a groove space of the one of the hollow profiles. An insertion head **61** of a tool **6** is integrated, which is integrally formed at one end in a round profile. The insertions head **61** has longitudinal notches **60** in its peripheral surface.

Regarding claim 39, the diameter of the round profile of the tool **6** is shorter than a depth of the groove space of the hollow profile.

Claim Rejections - 35 USC § 103

Claims 24-27, 40-42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller, DE-20,106,561, in view of Langer, 4,685,848.

Regarding claim 24, Muller, as discussed, fails to disclose the screw head tapering conically towards a head surface remote from the shaft. A wall surface, which is inclined at an angle with respect to the longitudinal axis of the shaft, is provided with the grooves or notches and ribs **310**. Langer teaches, in Figures 8-9B, a screw head tapering conically ¹⁷⁴ towards a head surface remote from the shaft to be able to use a tool at an angle to rotate a screw (see Figure 9A). Therefore, as taught by Langer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the screw head tapering conically towards a head surface remote from

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the shaft to provide ribs and grooves to be able to use the tool at an angle greater than what is allowed in Muller.

Regarding claim 25, given the modification, the angle will be approximately 45 degrees.

Regarding claim 26, Muller, as modified, fails to disclose the screw head having, between a shaft-facing connection surface and the inclined wall surface, an annular section of constant diameter in which the shaft-facing ends of the notches and the ribs form a crenellated edge pattern. Langer teaches, in Figures 8-9B, a screw head having between a shaft-facing connection surface and an inclined wall surface, an annular section of constant diameter (Figure 9B) in which the shaft-facing ends of the notches and the ribs form a crenellated edge pattern. Langer does not mention any particular purpose for the annular section of constant diameter; however, it would appear that one skilled in the art, at the time the invention was made, can simply replace the screw head of Muller with that of Langer since either screw head will turn the screw to fasten the profiles together. Therefore, as taught by Langer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the screw head containing the annular section of constant diameter with that of Muller since the screw head will function equally to turn the screw.

Regarding claim 27, given the modification of claim 24, the inclined wall surface will end at a radial step surface (between 310 and 32 in Figure 9 of Muller; note that in Figure 9 of Muller, portion 310 becomes conical with the teeth). The radial step surface surrounds in an annular manner an integrally formed top body 32 of the screw head. The top body 32 has a head surface (the end surface).

Regarding claim 40, Muller, as discussed, fails to disclose the peripheral surface of the insertion head tapering conically. Langer teaches, in Figures 8-9B, a peripheral surface of an insertion head tapering conically to rotate a screw with tapering teeth. Therefore, as taught by Langer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the tool of Muller with that of Langer since either tool will turn the screw of Muller.

Regarding claim 41, given the modification, the angle between an axis of the round profile and the peripheral outer surface of the insertion head is approximately 20 to 40 degrees.

Regarding claim 42, Muller, as discussed, fails to disclose a protective section of a protective surface bears against the peripheral or outer surface of the insertion head and the protective surface being releasably fixed to the round profile. Langer teaches, in Figure 9A, a protective section of a protective surface bears against the peripheral or outer surface of an insertion head 190, and the protective surface being releasably fixed

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to the round profile to provide a fulcrum to the tool to be rotated (col. 8, lines 24-26).

Therefore, as taught by Langer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a protective surface bearing against the peripheral or outer surface of the insertion head and the protective surface being releasably fixed to the round profile to provide a fulcrum to the tool to be rotated.

Regarding claim 45, given the modification, the angle would have been approximately 25 degrees.

Allowable Subject Matter

Claim 43 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 44 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 43, the prior art of record does not disclose or suggest a protective surface comprising a protective plate having a lateral section which is bent

out from the surface of a holding section on which the lateral section the protective section is integrally formed in an inclined manner. The closest prior art, Muller, DE-20,106,561, in view of Langer, 4,685,848, teaches a protective section of a protective surface as rejected in claim 42; however, there is no reason to modify the combined teachings; and,

regarding claim 44, this claim depends from claim 44.

Response to Arguments

Applicant's arguments filed April 10, 2008 have been fully considered but they are not persuasive.

Applicant argues that the toothed structure 310 is only placed along the collar 31 and does not extend longitudinally along the axis S of the shaft of clamping screw 3. In response, it should be noted that rejected claim 23 does not set forth "the ribs extending longitudinally along the axis S of the shaft of clamping screw 3" and thus the argument is not commensurate with the scope of the claim. Nevertheless, it should be noted that this feature is still taught by Muller as the teeth 310 extend along both axially and radially of the shaft as part of the three dimensional structure. Applicant further argues that the examiner mischaracterizes the teachings of Muller. In response, the examiner is not mischaracterizing the teachings. Further, the examiner is even providing a marked-up figure to convey the examiner's position as to how Muller anticipates the

claims. In particular, note the planes illustrated in the marked-up attachment. If the teeth do not extend longitudinally as is alleged, then how do they extend and where is the basis for this interpretation? Accordingly, Muller still reads upon the language of the claim.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-

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7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/E. G./

Examiner, Art Unit 3679

August 23, 2008

Attachments: one marked-up page of Muller, DE-20,106,561.
certified English Translation of Muller, DE-20,106,561.

/Daniel P. Stodola/
Supervisory Patent Examiner, Art Unit 3679

